



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/562,483

01/23/2007

Eui Tai Lee

123037-05167948

6227

22429

7590

05/27/2009

LOWE HAUPTMAN HAM & BERNER, LLP  
1700 DIAGONAL ROAD  
SUITE 300  
ALEXANDRIA, VA 22314

EXAMINER

TANNER, JOCELIN C

ART UNIT

PAPER NUMBER

3731

MAIL DATE

DELIVERY MODE

05/27/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/562,483	<b>Applicant(s)</b> LEE ET AL.	
	<b>Examiner</b> JOCELIN C. TANNER	<b>Art Unit</b> 3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/23/2007</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**2. Claims 1, 4 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chin (US Patent No. 5,391,182) in view of Young (US Patent No. 4,906,231).**

3. Regarding claim 1, Chin discloses a loop suture (316) that is threaded between two pieces of tissue surrounding a wound, a tightening member (310) that is capable of gathering both ends of the threaded loop suture and of exerting a pressure of wound tightening force, a pulling member (346) that is capable of pulling the loop suture, and a housing member (334) that houses the pulling member and is capable of tightening the loop suture (column 6, lines 8-19, Figs. 5F-5H). However, Chin fails to disclose a locking member.

Young teaches a device having a telescoping plunger or "pulling member" (20) within a barrel or "housing" (12) wherein a plunger guide or "locking member" (30) having guide slots (32, 33) and detents (34) that engage the ribs (22) of the pulling member, thus preventing reverse movement of the pulling member (column 2, lines 56-67, Fig. 2).

Art Unit: 3731

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the device of Chin with a locking member, as taught by Young, to restrict movement of a device to ensure safety.

4. Regarding claim **4**, Young discloses a pulling member (20) having a saw tooth outside surface (22, 23) and a locking member having a saw tooth inside surface (34) (column 2, lines 55-67, Fig. 2).

5. Regarding claim **13**, Young discloses a loosening means wherein a plunger guide (30) includes two sections or covers (30a, 30b) that are capable of being joined together and engaged or disengaged from the pulling member (20) (Fig. 1).

**6. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chin (US Patent No. 5,391,182) in view of Young (US Patent No. 4,906,231), as applied to claim 1 above, and further in view of Yoon (US Patent No. 5,478,353).**

7. Regarding claim **2**, the combination of Chin and Young discloses all of the limitations previously discussed except for an elastic housing member.

Yoon teaches a device having a pulling member (17) telescopically disposed within a housing (19) wherein the pulling member and housing are both disposed within tubular housing (11) and are formed of elastic material (column 6, lines 9-13, Fig. 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed the housing member of the device of the combination of Chin and Young of an elastic material, as taught by Yoon, for the predictable result of preventing trauma during treatment.

Art Unit: 3731

8. Regarding claim 3, Yoon teaches a housing member (19) having a scale to allow the user to control the tension of the suture (column 9, line 34, Fig. 5).

**9. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chin (US Patent No. 5,391,182) in view of Young (US Patent No. 4,906,231), as applied to claim 1 above, and further in view of Akerfeldt et al. (US Patent No. 6,860,895).**

10. Regarding claims 5 and 6, the combination of Chin and Young discloses all of the limitations previously discussed except for a strain gauging means.

Akerfeldt et al. teaches a device including a spring (166) that is connected to suture (6) via block (164) wherein the suture is released when the pulling force applied to the suture exceeds the force of the wire spring (166) (column 9, lines 63-67, column 10, lines 1-5, Fig. 12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the device of the combination of Chin and Young with strain gauging means, as taught by Akerfeldt et al., to ensure safe closure of a wound and avoid the risk of rupturing a vessel.

**11. Claims 7, 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chin (US Patent No. 5,391,182) in view of Young (US Patent No. 4,906,231), as applied to claim 1 above, and further in view of Murray et al. (US Patent No. 5,190,526).**

Art Unit: 3731

12. Regarding claims **7, 8 and 10**, the combination of Chin and Young discloses all of the limitations previously discussed except for a buffering means formed of an elastic member and inserted into a predetermined position of the pulling member.

Murray et al. teaches a device including pulling member (2a) disposed within a housing member (1a) wherein a spring (3c) connects two ends of the pulling member (Figs. 8-12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the device of the combination of Chin and Young with buffering means, as taught by Murray et al., to control the retraction of the pulling member.

13. **Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chin (US Patent No. 5,391,182) in view of Young (US Patent No. 4,906,231) and in view of Murray et al. (US Patent No. 5,190,526), as applied to claim 7 above, and further in view Yoon (US Patent No. 5,478,353).**

14. Regarding claim **9**, the combination of Chin, Young and Murray et al. discloses all of the limitations previously discussed except for a buffering means formed of an elastic member and inserted into a predetermined position of the housing member.

Yoon teaches a device having a pulling member (17) telescopically disposed within a housing (19) wherein a spring (69) is compressed within the housing between the end cap (65) and the pulling member (column 6, lines 1-2, Fig. 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the housing member of the device of the

Art Unit: 3731

combination of Chin, Young and Murray et al. with buffering means, as taught by Yoon, to inhibit unintentional proximal movement.

**15. Claims 11, 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chin (US Patent No. 5,391,182) in view of Young (US Patent No. 4,906,231), as applied to claim 1 above, and further in view of Goodin et al. (US Patent No. 4,723,938).**

16. Regarding claims **11 and 12**, the combination of Chin and Young discloses all of the limitations previously discussed except for a loosening means including a female nut and a bolt.

Goodin et al. teaches device including a pulling member (36) having internal threads or a "bolt" (42) is disposed within a housing (12) having corresponding external threads or "female nut" wherein a knob or "winding screw handle" (48) is capable of being rotated to adjust the position of the pulling member in the proximal distal directions (column 3, lines 56-67, column 4, lines 1-4, Fig. 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the device of the combination of Chin and Young with loosening means, as taught by Goodin et al., to allow the user to control the movement of the pulling member.

17. Regarding claims **14**, Goodin et al. teaches device including a pulling member (36) disposed within a housing (12) wherein a knob or "winding screw handle" (48) is capable of being rotated to adjust the position of the pulling member in the proximal distal directions (column 3, lines 56-67, column 4, lines 1-4, Fig. 2).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOCELIN C. TANNER whose telephone number is (571)270-5202. The examiner can normally be reached on Monday through Thursday between 9am and 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan Nguyen can be reached on 571-272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jocelin C. Tanner/  
5/21/2009  
Examiner, Art Unit 3731

/Anhtuan T. Nguyen/  
Supervisory Patent Examiner, Art Unit 3731  
5/22/09